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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,033	12/21/2000	Nobuhiro Kurata	2309/01095	9174

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DARBY & DARBY P.C.
805 Third Avenue
New York, NY 10022

EXAMINER

SALVATORE, LYNDA

ART UNIT PAPER NUMBER

1771

DATE MAILED: 06/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,033

Applicant(s)

KURATA ET AL.

Examiner

Lynda M Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission, Paper No. 7, filed on 5/01/03 has been entered.

Response to Amendment

2. Applicant's amendment and accompanying remarks, Paper No. 8 have been entered. Claims 10 and 11 have been added. Accordingly, claims 1-11 are now pending. Applicant's remarks with respect to the 103(a) rejections of claims 1-9 as set forth in sections 3-5 of the last Office Action, Paper No. 6, have been carefully considered and are found persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Srinivasan et al., US 5,500,281.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 10 and 11 are indefinite for the recitation of "a water decomposable fibrous layer having properties of dispersing absorbed liquid in a direction perpendicular to a direction of

penetration of the liquid for preventing localized concentration of the absorbed liquid, of a which an uppermost layer adjacent to the spun-laced surface layer is the water-decomposable fibrous layer". More specifically, it is unclear to the Examiner how the "water decomposable fibrous layer" provides these properties. Does the Applicant intend for the "water decomposable fibrous layer" to be "capable" of having said properties? If so, the Applicant should be aware that such a recitation of having the capability of performing a function is not a positive limitation but only requires the ability to so perform. Thus, for examination purposes said property limitations are not given patentable weight at this time.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 1,2,7,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christon et al., PCT Application WO 97/18784 in view of Gross et al., US 6,403,857 for reasons set forth in sections 3 of the last Office Action dated September 30th, 2002 and further in view of Srinivasan et al., US 5,500,281.

With regard to claims 1,7,10, and 11, the Applicant argues that the previously relied upon reference of Roe failed to teach water-decomposable spun-laced fabric and there is no suggestion or motivation present to combine said reference with Christon et al. In this case, the Applicant's arguments are found persuasive with respect to the Roe reference. However, the patent issued to Srinivasan et al., teaches an absorbent, flusable, biodegradable non-woven fabric suitable for use as wipes, wraps, and absorbent pads (Abstract). Srinivasan et al., teaches producing said non-woven using a blend of polyvinyl acetate (PVA) fibers and absorbent fibers, which are carded

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onto a moving web (Abstract). Srinivasan et al., further teaches that the fiber web may also be hydroentangled and patterned for enhanced strength and textural properties (Abstract).

Srinivasan et al., teaches patterning the web with low energy hydroentanglement to enhance the final fabric's strength and texture. Turning to the Christon et al., reference, recall that the top sheet may be manufactured from air laid, wet laid or carded non-woven materials (Page 17, 10-15).

To that end, motivated to impart strength and texture enhancement, it would have been obvious to one having ordinary skill in the art at the time to hydroentangle the carded non-woven of Christon et al., as taught by Srinivasan et al

With regard to claim 2, the Applicant argues that previously cited reference of Chmielewski et al., fails to teach a water dispersible top sheet. As such, it is the position of the Applicant that there is no motivation to combine said reference with Christon et al. Applicant's arguments are found persuasive with regard to the Chmielewski et al., reference. However, recall that the PCT application to Christon et al., discloses a flushable and dispersible absorbent article comprising a top sheet, a back sheet and absorbent core positioned between said top sheet and back sheet (Abstract). Christon et al., discloses that the absorbent core may include creped cellulose, wadding, cellulosic fibers, or tissue laminates as well as superabsorbent polymers, gelling materials or combinations of materials. The absorbent core may also comprise varying gradients and liquid acquisition zones as well as including one or more layers of materials (Page 7, lines 3-17).

Christon et al., fails to disclose the claimed orientation of the absorbent layers, however, the patent issued to Gross discloses a super absorbent layer adhered to the lower surface of a

fibrous structure (Figure 1a and Abstract). The super absorbent layer comprises super absorbent polymer particles and a water-soluble or water dispersible polymeric binder (Column 3, lines 39-41). The super absorbent polymer particles may be prepared from cross-linking suitable water soluble polymers (Column 4, lines 7-13). Gross further discloses a distribution layer positioned over the surface of the fibrous layer as shown in figure 1b.

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable under 35 U.S.C. 103(a) over Christon et al., PCT Application WO 97/18784 in view of Gross et al., US 6,403,857 and further in view of Srinivasan et al., US as applied to claim 1 above and further in view of Wang et al., US 2002/0065363 A1.

Christon et al., and Gross et al., fail to teach the claimed polyvinyl alcohol, however, water soluble or swellable polyvinyl alcohols are known in the art. For example, the patent issued to Wang et al., discloses a cold-water soluble polyvinyl alcohol polymer composition, which may be formed into fibers or films (Abstract and Section 0053). Wang et al., teaches that the polymer compositions are useful as components in flushable personal care articles such as baffle film for feminine care articles (Section 0030).

Therefore, motivated by the desire to have an absorbent composite sheet comprising a water soluble or swellable polyvinyl alcohol film it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the polyvinyl alcohol film taught by Wang et al., as the super absorbent polymer layer taught by Christon et al or Gross et al.

With regard to claim 5 Wang et al., does not disclose the basis weight of the polyvinyl alcohol, however, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to form a film having the claimed basis weight limitation since Wang et al., teaches using the film in disposable personal care articles. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

Allowable Subject Matter

9. Claim 8 is allowable over the prior art of record. Specifically, the prior art fails to teach or fairly suggest an absorbent layer comprising two water-decomposable fibrous layers and a water-soluble or water-swellaable polymer layer sandwiched between the two water-decomposable layers. An updated search produced no new substantial art for which to base a rejection and there is no motivation to combine prior art reference to form an obvious type rejection.

10. Claims 3 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. With regard to claim 3, the prior art of record does teach or fairly suggest an absorbent layer formed for one composite sheet which is folded into two so that the constituent layers thereof are in an order of water-decomposable fibrous layer, polymer layer, polymer layer and water-decomposable fibrous layer with the uppermost water-decomposable fibrous layer being adjacent to the surface layer. With regard to claim 9, the prior art of record fails to teach the limitations of claim 8 from which 9 depends. An updated search produced no new substantial art for which to base a rejection and there is no motivation to combine prior art references to form an obvious type rejection.

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Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ls
May 28, 2003


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700